

**REMARKS**

This Amendment is submitted in response to the Office Action dated April 15, 2005, having a shortened statutory period set to expire July 15, 2005. The present amendment proposes amending Claims 1 and 8, canceling Claims 15-20, and adding Claims 21-23. Upon entry of the proposed amendments, Claims 1-14 and 21-23 will now be pending.

Applicants appreciate the time and courtesy extended by the Examiner during a July 12, 2005 teleconference. While concrete agreement was reached regarding allowance of the pending claims.

**OBJECTION TO THE TITLE**

In paragraph 2 of the present Office Action, the title has been objected to as being non-descriptive. Applicants now follow the Examiner's suggestion, and submit an amended title "METHOD AND SYSTEM FOR ASSIGNING PHYSICAL AND IP ADDRESSES IN ETHERNET."

**REJECTIONS UNDER 35 U.S.C. § 102**

In paragraph 4 of the present Office Action, the Examiner has rejected Claims 1-20 under 35 U.S.C. § 102(e) as being anticipated by *Ding et al.* (U.S. Patent Application No. US 2003/0055929 A1 – "Ding"). Applicants respectfully traverse these rejections.

*Ding* teaches a system of interconnected modules that are managed and controlled as an integrated unit without requiring any one of the interconnected modules to operate as a fully centralized manager (*Ding*, first part of paragraph [0016]). If management and control operations require synchronization or other local management, one of the modules is designated as a base module to supply such control (*Ding*, last part of paragraph [0016]). The only teaching for obtaining an IP address for a module uses BOOTP, in which an IP address is obtained from a Dynamic Host Configuration Protocol (DHCP) server at startup (*Ding*, paragraph [0057]).

With regards to exemplary Claim 1, *Ding* does not teach or suggest "connecting Ethernet Computer Enclosure Services (CES) devices, wherein a CES device is a system for providing monitor, control and diagnostic services in a computer." (See page 1, lines 15-17; page 12 and Figure 7 of the present specification for support of this feature.) Applicants point out that a CES device is not equivalent to the "modules" taught by *Ding*, since such modules do not "providing monitor, control and diagnostic services in a computer." Furthermore, *Ding* does not teach or suggest "assigning, by said master CES device, a unique Internet Protocol (IP) address to said slave CES node...under a control of only a User Datagram Protocol (UDP) stack, said UDP stack being under an exclusive control of a System Power Control Network (SPCN) application." (See pages 14-15 of the present specification for support of this feature.) By using only the UDP stack (rather than a full TCP/IP stack as taught in all of *Ding*'s scenario cases), a smaller system such as shown in Figure 5 of the present application may be utilized.

Claim 8 is amended to include the salient features of newly amended Claim 1.

With respect to new Claim 21, *Ding* does not teach or suggest a "method for assigning Internet Protocol addresses to nodes in a computer network" by "assigning, by the master node, a physical address to each of the slave nodes, wherein the physical address describes a physical topological location of a slave node in the ring; and assigning, by the master node, a unique Internet Protocol (IP) address to each of the slave nodes, wherein each IP address for a specific slave node contains a value in an IP field, and wherein the value in the IP field is the same as the physical address of that specific slave node." That is, *Ding* does not assign an IP address having a field that is the same as the physical topological position of a node in a slave node in a ring. For example, Figure 11 of the present specification shows Slave Node 46, which is in the second position in the ring, has an IP address (for both Ethernet ports) that ends in "2," while the third positioned slave node 48 has IP addresses ending in "3," etc. (See also Tables I and II on pages 21-22 of the present specification for support.)

With respect to new Claim 21, *Ding* does not teach or suggest "sending, by the master node, a first IP address assignment message to a first slave node in the ring of slave nodes, wherein the first IP address assignment message is sent to a first default IP address stored in the

first slave node by a manufacturer of the first slave node; changing an IP address of the first slave node according to the first IP address assignment message; sending, by the master node, a second IP address assignment message to a second slave node in the computer network, wherein the second IP address assignment message is sent to a second default IP address stored in the second slave node by a manufacturer of the second slave node, and wherein the second default IP address is the same IP address as the first default IP address; and changing an IP address of the second slave node according to the second IP address assignment message.” That is, the master node sends a message to the first slave in the ring telling the first slave to change its IP address from its factory set default IP address to a new IP address. After the first slave node changes its IP address, the master node sends a similar message to the same default IP address to the first slave node. Since the first slave node is no longer using the default IP address, it passes the message on to the second slave node, which changes its IP address to a second new IP address. The process continues until each slave node in the ring has a new IP address from the master node. (See page 17 – 18 of the present specification for support.) *Ding* does not teach or suggest such a method for assigning IP addresses, but rather uses a standard BOOTP/DHCP process.

With respect to new Claim 23, *Ding* does not teach or suggest that “the IP address assignment messages are sent via Ethernet ports in the slave nodes, and wherein the Ethernet ports communicate via an Ethernet stack, and wherein the Ethernet stack communicates only between the Ethernet ports and an IP stack, and wherein the IP stack communicates only between the Ethernet stack and a User Datagram Protocol (UDP) layer, and wherein the UDP layer communicates solely between the IP stack and a System Power Control Network (SPCN) layer, and wherein the SPCN layer communicates solely between the UDP layer and an Operating System (OS) of a node.” (See Figure 5 of the present specification and the discussion above for this feature claimed in Claim 1.)

CONCLUSION

As the cited prior art does not teach or suggest all of the presently claimed limitations, Applicants now respectfully request a Notice of Allowance for all pending claims.

No extension of time for this response is believed to be necessary. However, in the event an extension of time is required, that extension of time is hereby requested. Please charge any fee associated with an extension of time as well as any other fee necessary to further the prosecution of this application to **IBM CORPORATION DEPOSIT ACCOUNT No. 09-0465**.

Respectfully submitted,



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